General

Guideline Title

American Academy of Orthopaedic Surgeons appropriate use criteria for management of osteochondritis dissecans of the femoral condyle.

Bibliographic Source(s)

American Academy of Orthopaedic Surgeons (AAOS). American Academy of Orthopaedic Surgeons appropriate use criteria for management of osteochondritis dissecans of the femoral condyle. Rosemont (IL): American Academy of Orthopaedic Surgeons (AAOS); 2015 Dec 4. 79 p. [3 references]

Guideline Status

This is the current release of the guideline.

This guideline meets NGC's 2013 (revised) inclusion criteria.

Recommendations

Major Recommendations

Assumptions of the Writing Panel/Voting Panel

Before these appropriate use criteria are consulted, it is assumed that:

- The clinician knows the contraindication to the utilization of certain medications and the anesthetic or important surgical contraindications to operative interventions.
- The patient is healthy enough to undergo surgery if indicated.
- The patient has a diagnosis of osteochondritis dissecans (OCD) of the knee (not including irregular epiphyseal ossification or epiphyseal dysplasia).
- The patient has an OCD lesion that may lead to loss of function or arthritis OR is symptomatic including pain, instability, stiffness, and mechanical symptoms.
- The patient's symptoms are consistent with the history, physical exam, and imaging findings.
- The imaging findings are consistent with OCD of the knee (evidence of OCD lesion, with associated sub-chondral bone changes, in locations including medial femoral condyle and/or lateral femoral condyle).
- Anterio-posterior (AP) and/or posterio-anterior (PA)-flexion weight-bearing (notch views), lateral, and patellar view radiographs are obtained. If malalignment is suspected, long leg films.
- Addressing malalignment, as is appropriate, is recommended.

Imaging definition of instability:

Plain radiograph definition of instability: fragment is partially or totally displaced.

If a magnetic resonance image (MRI) is obtained, findings of instability are suggested by the following:

In patients with closed physes:

A high T2 signal rim surrounding the OCD lesion.

The presence of subchondral cyst-like lesions.

Disruption of articular cartilage signal.

In patients with open physes:

High T2 signal rim indicates instability only if it is the same signal intensity as the joint fluid and the lesion is surrounded by a second, low T2 signal rim.

The lesion demonstrates multiple breaks in the subchondral bone plate.

Cyst-like lesions suggest instability only if they are large (>5 mm) or multiple.

The physical examination, history, and imaging studies have excluded the following potential causes of knee pain:

Referred pain from the spine

Ipsilateral hip disorder, including developmental dysplasia of the hip (DDH), slipped capital femoral epiphysis (SCFE), etc.

Ankle/foot deformity

Non-articular causes of knee pain including soft-tissue disorders

Neoplasm

Neuropathy

Infection

Acute knee injury

Stress fractures, insufficiency fracture, osteonecrosis, or symptomatic metabolic bone disease

Proximal tibiofibular pain

The physician has an informed discussion with the patient about the treatment options and that the optimum treatment options may change over time for the patient. Before operative intervention is recommended, the appropriateness and potential efficacy of non-operative intervention has been considered.

All patients with defined OCD lesions should receive surveillance and follow up.

In patients with open physes, contralateral x-rays may be considered. If symptoms or findings are bilateral, contralateral x-rays should be obtained.

The patient has no contralateral lower extremity disease (including OCD) that would preclude appropriate treatment for the OCD lesion in question.

Idiopathic familial OCD is not excluded from this appropriate use criteria (AUC).

Physical therapy addresses impaired strength, mobility, and function and can assist with progression back to activities of daily living (ADLs) sports, work, and functional activities.

The location of all lesions in this AUC are assumed to be in the medial or lateral femoral condyle. Although medial and lateral femoral condyle lesions are distinct, the appropriateness of treatment recommendations is the same.

If the patient has a change in status regarding pain, swelling, or mechanical symptoms, that patient should be reassessed and treatment modified accordingly.

Results of Appropriateness Rating

The AUC tables (see pages 19-68 in the original guideline document) contain the final appropriateness ratings assigned by the eleven members of the voting panel. Patient characteristics are found under the column titled "Scenario". The AUC for each patient scenario can be found within each of the 10 treatment rows. These criteria are formatted by appropriateness labels (i.e., "R"=Rarely Appropriate, "M"=May Be Appropriate, and "A"=Appropriate), median rating, and + or - indicating agreement or disagreement amongst the voting panel, respectively.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Osteochondritis dissecans (OCD) of the femoral condyle

Note: The following conditions are not covered in this Appropriate Use Criteria (AUC):

Irregular epiphyseal ossification (developmental irregularity/accessory ossification centers). Normal variant in child that mimics juvenile osteochondritis dissecans. May be asymptomatic and often bilateral (bilateral radiographs are often indicated). Follow-up may be indicated to distinguish resolving from progressing ossification variants
Epiphyseal dysplasias that may include dwarfing syndrome, multiple epiphyseal dysplasia, metaphyseal dysplasias, and genetic syndromes that may mimic OCD
Osteonecrosis mimicking OCD
Patella, femoral trochlea, and tibial plateau OCD lesions

Guideline Category

Diagnosis

Management

Treatment

Clinical Specialty

Family Practice

Orthopedic Surgery

Physical Medicine and Rehabilitation

Sports Medicine

Intended Users

Physical Therapists

Physicians

Guideline Objective(s)

To help determine the appropriateness of clinical practice guideline recommendations for the heterogeneous patient population with osteochondritis dissecans (OCD) routinely seen in practice

Target Population

Patients with osteochondritis dissecans

Interventions and Practices Considered

1. Activity restriction – elimination of impact or painful activities
2. Physical therapy
3. Nonoperative management
    - Casting
    - Bracing
    - Restricted weight-bearing (assistive devices)
4. Drilling of intact osteochondritis dissecans (OCD) lesion (retro-articular or trans-articular)
5. Fixation with or without bone grafting
6. Fragment excision and isolated debridement
7. Fragment excision and marrow stimulation
8. Osteochondral autograft transfer
9. Osteochondral allograft transplantation
10. Autologous chondrocyte implantation (with or without bone grafting)

Note: The Work Group was unable to find quality evidence to support all of the interventions listed above in the management of patients with OCD. Therefore, they are unable to recommend for or against some of these interventions in certain patient populations. See the original guideline document for context.

Major Outcomes Considered

- Diagnostic performance of clinical examination with radiographs and of selective magnetic resonance imaging (MRI) in the evaluation of intra-articular knee disorders
- Pain relief
- Functional status
- Range of motion

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Concurrent with the writing panel developing the criteria, the American Academy of Orthopaedic Surgeons (AAOS) Evidence-Based Medicine Unit undertook a literature review update based on the search strategy used to construct the 2010 AAOS Clinical Practice Guideline on Diagnosis and Treatment of Osteochondritis Dissecans (see the "Availability of Companion Documents" field). All literature published after the release of the clinical practice guideline was reviewed and reported if it was relevant to the treatment of osteochondritis dissecans. This literature review helped to inform the decisions of the writing panel and voting panel where available and necessary. The literature review also considered lower quality evidence when the best available evidence (i.e., randomized control trials) did not contain information relevant to the clinical scenarios. For details regarding the search strategy used in the updated search, see Appendix E in the original guideline document.

The search terms used and the inclusion and exclusion criteria for the 2010 clinical practice guideline can be found in the Methods section of that guideline (see the "Availability of Companion Documents" field).

Number of Source Documents

Sixteen articles were included in the clinical practice guideline on the diagnosis and treatment of osteochondritis dissecans.

1641 abstracts were reviewed; 3 articles were included in the review after full text review and quality analysis for the guideline supplemental literature search. See Appendix D of the original guideline document for a study attrition chart for the guideline supplemental literature search.

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

For information on how the quality of data was evaluated, see the American Academy of Orthopaedic Surgeons (AAOS) guideline on the diagnosis and treatment of osteochondritis dissecans (see the "Availability of Companion Documents" field).

Methods Used to Analyze the Evidence

Systematic Review with Evidence Tables

Description of the Methods Used to Analyze the Evidence

The purpose of this Appropriate Use Criteria (AUC) is to help determine the appropriateness of clinical practice guideline recommendations for the heterogeneous patient population routinely seen in practice. The best available scientific evidence is synthesized with collective expert opinion on topics where gold standard randomized clinical trials are not available or are inadequately detailed for identifying distinct patient types. When there is evidence corroborated by consensus that expected benefits substantially outweigh potential risks, exclusive of cost, a procedure is determined to be appropriate. The American Academy of Orthopaedic Surgeons (AAOS) uses the Research and Development/University of California, Los Angeles (RAND/UCLA) Appropriateness Method (RAM). The process includes these steps: reviewing the results of the evidence analysis, compiling a list of clinical vignettes, and having an expert panel comprised of representatives from multiple medical specialties to determine the appropriateness of each of the clinical indications for treatment as 'Appropriate,' 'May Be Appropriate,' or 'Rarely Appropriate.'

Methods Used to Formulate the Recommendations

Expert Consensus (Delphi)

Description of Methods Used to Formulate the Recommendations

The American Academy of Orthopaedic Surgeons (AAOS) uses the Research and Development/University of California, Los Angeles (RAND/UCLA) Appropriateness Method (RAM).

Two panels participated in the development of the AAOS appropriate use criteria (AUC) for Treatment of Osteochondritis Dissecans (OCD). Members of the writing panel developed a list of 288 patient scenarios, for which 13 treatments were evaluated for appropriateness. The voting panel participated in two rounds of voting. During the first round of voting, the voting panel was given approximately two months to independently rate the appropriateness of each the provided treatments for each of the relevant patient scenarios as 'Appropriate', 'May Be Appropriate', or 'Rarely Appropriate' via an electronic ballot. After the first round of appropriateness ratings were submitted, AAOS staff calculated the median ratings for each

patient scenario and specific treatment. An in-person voting panel meeting was held in Rosemont, IL on August 22nd of 2015. During this meeting, voting panel members addressed the scenarios/treatments which resulted in disagreement (definition of disagreement can be found in Table 3 in the original guideline document). The voting panel members discussed the list of assumptions, patient indications, and treatments to identify areas that needed to be clarified/edited. After the discussion and subsequent changes, the group was asked to rerate their first round ratings during the voting panel meeting, only if they were persuaded to do so by the discussion and available evidence. The voting panel determined appropriateness by rating treatments for the various patient scenarios (i.e., criteria) as 'Appropriate', 'May Be Appropriate', or 'Rarely Appropriate'. There was no attempt to obtain consensus about appropriateness.

Developing Criteria

Members of the AUC for Treatment of Osteochondritis Dissecans writing panel, who are orthopaedic specialists in treating knee-related injuries/diseases, developed clinical scenarios using the following guiding principles:

> Patient scenarios must include a broad spectrum of patients that may be eligible for treatment of osteochondritis dissecans [*comprehensive*]
> Patient indications must classify patients into a unique scenario [*mutually exclusive*]
> Patient indications must consistently classify similar patients into the same scenario [*reliable, valid indicators*]

The writing panel developed the scenarios by categorizing patients in terms of indications evident during the clinical decision making process (see Figure 1 in the original guideline document). These scenarios relied upon definitions and general assumptions, mutually agreed upon by the writing panel during the development of the scenarios. These definitions and assumptions were necessary to provide consistency in the interpretation of the clinical scenarios among experts voting on the scenarios and readers using the final criteria.

Formulating Indications and Scenarios

The AUC writing panel began the development of the scenarios by identifying clinical indications typical of patients commonly presenting with osteochondritis dissecans in clinical practice. Indications are most often parameters observable by the clinician, including symptoms or results of diagnostic tests. Additionally, "human factor" (e.g., activity level) or demographic variables can be considered.

Indications identified in clinical trials (derived from patient selection criteria) included in AAOS Clinical Practice Guidelines (CPGs) served as a starting point for the writing panel and ensured that these Appropriate Use Criteria referred to the evidence base for the Treatment and Diagnosis of Osteochondritis Dissecans CPG. The writing panel considered this initial list and other indications based on their clinical expertise and selected the most clinically relevant indications (see Table 4 in the original guideline document). The writing panel then defined distinct classes for each indication in order to stratify/categorize the indication (see Table 4 in the original guideline document).

The writing panel organized these indications into a matrix of clinical scenarios that addressed all combinations of the classifications. The writing panel was given the opportunity to remove any scenarios that rarely occur in clinical practice, but agreed that all scenarios were clinically relevant. The major clinical decision making indications chosen by the writing panel divided the matrix of clinical scenarios into chapters, as follows: pain, mechanical symptoms, effusion, skeletal maturity, location of OCD lesion, stability of OCD fragment, and integrity of OCD fragment.

Creating Definitions and Assumptions

The AUC for Treatment of Osteochondritis Dissecans writing panel constructed concise and explicit definitions for the indications and classifications. This standardization helped ensure the way that the writing panel defined the patient indications was consistent among those reading the clinical scenario matrix or the final criteria. Definitions drew explicit boundaries when possible and were based on

standard medical practice or existing literature.

Additionally, the writing panel formulated a list of general assumptions in order to provide more consistent interpretations of a scenario (see Assumptions of the Writing Panel in the "Major Recommendations" field). These assumptions differed from definitions in that they identified circumstances that exist outside of the control of the clinical decision making process.

Assumptions also addressed the use of existing published literature regarding the effectiveness of treatment and/or the procedural skill level of physicians. Additionally, assumptions highlighted intrinsic methods described in this document such as the role of cost considerations in rating appropriateness or the validity of the definition of appropriateness. The main goal of assumptions was to focus scenarios so that they apply to the average patient presenting to an average physician at an average facility.

The definitions and assumptions should provide all readers with a common starting point in interpreting the clinical scenarios. This list of definitions and assumptions accompanied the matrix of clinical scenarios in all stages of the development of this AUC and appears in the Assumptions of the Writing Panel section in the "Major Recommendations" field.

Voting Panel Modifications to Writing Panel Materials

At the start of the in-person voting panel meeting, the voting panel was reminded that they have the ability to amend the original writing panel materials if the amendments resulted in more clinically relevant and practical criteria. In order to amend the original materials, the voting panel members were instructed that a member must make a motion to amend and another member must "second" that motion, after which a vote is conducted. If a majority of voting panel members voted "yes" to amend the original materials, the amendments were accepted. See the "Methods" section in the original guideline document for amendments/additions to the original AUC materials.

Determining Appropriateness

Voting Panel

A multidisciplinary panel of clinicians was assembled to determine the appropriateness of treatments for osteochondritis dissecans. A non-voting moderator, who is an orthopaedic surgeon, but is not a specialist in the treatment of osteochondritis dissecans, moderated the voting panel. The moderator was familiar with the methods and procedures of AAOS Appropriate Use Criteria and led the panel (as a non-voter) in discussions. Additionally, no member of the voting panel was involved in the development (writing panel) of the scenarios.

The voting panel used a modified Delphi procedure to determine appropriateness ratings. The voting panel participated in two rounds of voting while considering evidence-based information provided in the literature review. While cost is often a relevant consideration, panelists focused their appropriateness ratings on the effectiveness of treatment for osteochondritis dissecans.

Rating Appropriateness

When rating the appropriateness of a scenario, the voting panel considered the following definition:

"An appropriate treatment for osteoarthritis of the knee is one for which the treatment is generally acceptable, is a reasonable approach for the indication, and is likely to improve the patient's health outcomes or survival."

They then rated each scenario using their best clinical judgment, taking into consideration the available evidence, for an average patient presenting to an average physician at an average facility as follows:

Table. Interpreting the 9-Point Appropriateness Scale

Rating	Explanation
7-9	Appropriate:

Rating	Explanation
	Appropriate for the indication provided, meaning treatment is generally acceptable and is a reasonable approach for the indication and is likely to improve the patient's health outcomes or survival.
4-6	May Be Appropriate: Uncertain for the indication provided, meaning treatment may be acceptable and may be a reasonable approach for the indication, but with uncertainty implying that more research and/or patient information is needed to further classify the indication.
1-3	Rarely Appropriate: Rarely an appropriate option for management of patients in this population due to the lack of a clear benefit/risk advantage; rarely an effective option for individual care plans; exceptions should have documentation of the clinical reasons for proceeding with this care option (i.e. procedure is not generally acceptable and is not generally reasonable for the indication).

Each panelist uses the scale below to record their response for each scenario:

Appropriateness of [Topic]

Rarely Appropriate: 1, 2, 3
May Be Appropriate: 4, 5, 6
Appropriate: 7, 8, 9

Round One Voting

The first round of voting occurred after completion of the independent review of the scenarios by the review panel and approval of the final indications, scenarios, and assumptions by the writing panel. The voting panel rated the scenarios electronically using a personalized ballot created by AAOS staff using the AAOS AUC Electronic Ballot Tool. There was no interaction between panel members while completing the first round of voting. Panelists considered the following materials:

The instructions for rating appropriateness
The completed literature review, that is appropriately referenced when evidence is available for a scenario
The list of indications, definitions, and assumptions, to ensure consistency in the interpretation of the clinical scenarios

Round Two Voting

The second round of voting occurred during the in-person voting panel meeting on August 22, 2015. Before the in-person meeting started, each panelist received a personalized document that included their first round ratings along with summarized results of the first-round ratings that resulted in disagreement. These results indicated the frequency of ratings for a scenario for all panelists. The document contained no identifying information for other panelists' ratings. The moderator also used a document that summarized the results of the panelists' first round voting. These personalized documents served as the basis for discussions of scenarios which resulted in disagreement.

During the discussion, the voting panel members were allowed to add or edit the assumptions list, patient indications, and/or treatments if clarification was needed. They were also asked to record a new rating for any scenarios/treatments, only if they were persuaded to do so by the discussion and/or the evidence. After the final ratings were submitted, AAOS staff used the AAOS AUC Electronic Ballot Tool to export the median values and level of agreement for all voting items. There was no attempt to obtain consensus among the panel members.

Final Ratings

Using the median value of the second round ratings, AAOS staff determined the final levels of appropriateness. Disagreement among raters can affect the final rating. Agreement and disagreement were determined using the BIOMED definitions of Agreement and Disagreement, as reported in the RAND/UCLA Appropriate Method User's Manual, for a panel of 8 to 10 voting members (see Table 2 in the original guideline document). For this panel size, disagreement is defined as when ≥3 members'

appropriateness ratings fell within the appropriate (7-9) and rarely appropriate (1-3) ranges for any scenario (i.e., ≥3 members' ratings fell between 1-3 and ≥5 members' ratings fell between 7-9 on any given scenario and its treatment). If there is still disagreement in the voting panel ratings after the second round of voting, that voting item is labeled as "5" regardless of median score. Agreement is defined as ≤2 panelists rated outside of the 3-point range containing the median.

See Table 3 in the original guideline document for additional information on final ratings.

Rating Scheme for the Strength of the Recommendations

Not applicable

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

Internal Peer Review

Description of Method of Guideline Validation

American Academy of Orthopaedic Surgeons (AAOS) Appropriate Use Criteria (AUC) Section, the AAOS Council on Research and Quality, and the AAOS Board of Directors sequentially approved the Appropriate Use Criteria for Management of Osteochondritis Dissecans. See Appendix A in the original guideline document for additional information on documentation of approval.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of evidence supporting the recommendations is not specifically stated.

This Appropriate Use Criteria (AUC) for Treatment of Osteochondritis Dissecans is based on a review of the available literature and a list of clinical scenarios (i.e., criteria) constructed and voted on by experts in orthopaedic surgery and other relevant medical fields.

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

- The appropriate use criteria for management of osteochondritis dissecans of the femoral condyle are expected to improve patient care and obtain the best outcomes for patients.
- One potential benefit of surgery is the prevention or delay of severe osteoarthritis (osteoarthrosis). Another potential benefit is that these patients will be relieved of their existing symptoms.

Potential Harms

Surgery entails risks. These risks include, but are not limited to, bleeding, infection, damage to nerves and blood vessels, venous thromboembolic events, anesthesia complications, and surgical failure. Again, however, not performing surgery also carries a risk, irreversible osteoarthritis/osteoarthrosis.

Qualifying Statements

Qualifying Statements

- Volunteer physicians from multiple medical specialties created and categorized these Appropriate Use Criteria (AUC). These AUC are not intended to be comprehensive or a fixed protocol, as some patients may require more or less treatment or different means of diagnosis. These AUC represent patients and situations that clinicians treating or diagnosing musculoskeletal conditions are most likely to encounter. The clinician's independent medical judgment, given the individual patient's clinical circumstances, should always determine patient care and treatment.
- These criteria should not be construed as including all indications or excluding indications reasonably directed to obtaining the same results. The criteria intend to address the most common clinical scenarios facing all appropriately trained surgeons and all qualified physicians managing patients under consideration for treating osteochondritis dissecans. The ultimate judgment regarding any specific criteria should address all circumstances presented by the patient and the needs and resources particular to the locality or institution. It is also important to state that these criteria were developed as guidelines and are not meant to supersede clinician expertise and experience or patient preference.
- Some drugs or medical devices referenced or described in this document may not have been cleared by the Food and Drug Administration (FDA) or may have been cleared for a specific use only. The FDA has stated that it is the responsibility of the physician to determine the FDA clearance status of each drug or device he or she wishes to use in clinical practice.

Implementation of the Guideline

Description of Implementation Strategy

Disseminating Appropriate Use Criteria

All American Academy of Orthopaedic Surgeons (AAOS) Appropriate Use Criteria (AUCs) can be accessed via a user-friendly app that is available via the OrthoGuidelines Web site (www.orthoguidelines.org) or as a native app via the Apple and Google Play stores.

Publication of the AUC document is on the AAOS Web site at http://www.aaos.org/auc . This document provides interested readers with full documentation about the development of Appropriate Use Criteria and further details of the criteria ratings.

AUCs are first announced by an Academy press release and then published on the AAOS Web site. AUC summaries are published in the *AAOS Now* and the *Journal of the American Academy of Orthopaedic Surgeons (JAAOS)*. In addition, the Academy's Annual Meeting showcases the AUCs on Academy Row and at Scientific Exhibits.

The dissemination efforts of AUC include Web-based mobile applications, webinars, and online modules for the Orthopaedic Knowledge Online website, radio media tours, and media briefings. In addition AUCs are also promoted in relevant Continuing Medical Education (CME) courses and distributed at the AAOS Resource Center.

Other dissemination efforts outside of the AAOS include submitting AUCs to the National Guideline

Clearinghouse and to other medical specialty societies' meetings.

Implementation Tools

Mobile Device Resources

Resources

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)

American Academy of Orthopaedic Surgeons (AAOS). American Academy of Orthopaedic Surgeons appropriate use criteria for management of osteochondritis dissecans of the femoral condyle. Rosemont (IL): American Academy of Orthopaedic Surgeons (AAOS); 2015 Dec 4. 79 p. [3 references]

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2015 Dec 4

Guideline Developer(s)

American Academy of Orthopaedic Surgeons - Medical Specialty Society

Source(s) of Funding

The American Academy of Orthopaedic Surgeons exclusively funded development of these Appropriate Use Criteria. The American Academy of Orthopaedic Surgeons received no funding from outside commercial sources to support the development of these Appropriate Use Criteria.

Guideline Committee

Appropriate Use Criteria (AUC) for Treatment of Osteochondritis Dissecans Writing Panel

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Financial Disclosures/Conflicts of Interest

In accordance with American Academy of Orthopaedic Surgeons policy, all individuals whose names appear as authors or contributors to this document filed a disclosure statement as part of the submission process. All authors provided full disclosure of potential conflicts of interest prior to participation in the development of these Appropriate Use Criteria. Disclosure information for all panel members can be found in Appendix B in the original guideline document.

Guideline Status

This is the current release of the guideline.

This guideline meets NGC's 2013 (revised) inclusion criteria.

Guideline Availability

Available from the American Academy of Orthopaedic Surgeons (AAOS) Web site and the OrthoGuidelines Web site.

Availability of Companion Documents

The following are available:

American Academy of Orthopaedic Surgeons (AAOS). The diagnosis and treatment of osteochondritis dissecans. Guideline and evidence report. Rosemont (IL): American Academy of Orthopaedic Surgeons (AAOS); 2010 Dec 4. 182 p. Available from the American Academy of Orthopaedic Surgeons (AAOS) Web site.

AUC process. Rosemont (IL): American Academy of Orthopaedic Surgeons (AAOS). 9 p. Available from the AAOS Web site.

An interactive literature review used for the appropriate use criteria for the management of osteochondritis dissecans is available from the AAOS Web site.

A mobile app for the appropriate use criteria for the management of osteochondritis dissecans is available from the AAOS Web site.

Patient Resources

None available

NGC Status

This NGC summary was completed by ECRI Institute on November 29, 2016. The information was verified by the guideline developer on December 22, 2016. This summary was updated by ECRI Institute on February 15, 2017 following the U.S. Food and Drug Administration advisory on general anesthetic and sedation drugs.

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